Outcome: Fish Habitat

Goal: Sustainable Fisheries

Outcome: Continually improve effectiveness of fish habitat conservation and restoration efforts by identifying and characterizing critical spawning, nursery and forage areas within the Bay and tributaries for important fish and shellfish, and use existing and new tools to integrate information and conduct assessments to inform restoration and conservation efforts.

Long term Target: Improve spatial data and characterization of fish habitat and integrate information into management, strategic planning and decision-making.

2 year Target: Identify the most critical habitat areas and/or habitat requirements for a few priority species and identify shared priorities and collaborative actions across jurisdictions and partners.

Management Approach 1: Identify and prioritize threats to fish habitat at the jurisdictional and Baywide scale and propose actions to manage the threats.

Key Action** *Description of work/project. Define each major action step on its own row. Identify specific program that will be used to achieve action.*	**Performance Target(s)** *Identify incremental steps to achieve Key Action.*	**Participating Entity** *Identify responsible partner for each step.*	**Geographic Location**	**Timeline** *Identify completion date (month & year) for each step)*	**Estimated Project Cost** *Best estimate of total project cost (needed)*	**Available funding by Partner**	**Factors Influencing and/or Gap** *Identify related factor or gap in Management Strategy*
Continue to improve our understanding of specific habitat stressors to promote sound management strategies that can conserve and restore habitat for productive fisheries.	Review and utilize existing reports to characterize primary threats and stressors to fish habitat	Delaware, Pennsylvania, Virginia, Maryland and DC; Fish Habitat Action Team	n/a	Jun-16	n/a - staff	n/a	
	Work with TetraTech to compile and synthesize existing reports and data to develop summaries of key stressors and fisheries response that can be used by resource managers.	TetraTech, Fish Habitat Action Team	n/a				
	Evaluate living resource responses to dynamic ecosystem conditions of shoreline modifications, habitat restoration, climate forcing, and water quality.	Sustainable Fisheries GIT, Vital Habitats GIT	n/a		n/a - staff		
Totals						**n/a**	
Work with Chesapeake Bay Program (CBP) partners and Goal Implementation Teams (GITs) to identify threats and understand how those threats are being addressed.	Work with the healthy watershed GIT to coordinate development of metrics to identify healthy habitat for fisheries.	Fish Habitat Action Team	n/a	Sep-16			
	Work with Water Quality GIT to identify and prioritize specific water quality and toxics threats to fisheries and their habitats.	Fish Habitat Action Team	n/a	Dec-16			
Totals							
Develop thresholds and/or metrics for primary stressors and threats to characterize what aspects of habitat need to be maintained to support fish habitat functions.	Build on significant advances by Maryland DNR on how land use change is impacting tidal fish communities by developing and applying thresholds of impervious cover.	MD DNR, Fish Habitat Action Team					
Totals						**n/a**	

Management Approach 2: Compile and identify available data on habitats, habitat vulnerabilities and fish utilization at different life stages to develop a set of criteria for identifying areas of high-value fish habitat.							
Key Action**	**Performance Target(s)**	**Participating Entity**	**Geographic Location**	**Timeline**	**Estimated Project Cost**	**Available funding by**	**Factors Influencing and/or Gap** *Identify*
Incorporate fish utilization information into a threat matrix	Review existing (ACFHP, ASMFC, MD DNR) and develop matrices that target species by life stage. This information will be used to map the natural distribution of species in order to rank habitat use based on frequency distributions of occurrence.	STAR, Sustainable Fisheries GIT, Fish Habitat Action Team					
	Identification of spawning, nursery, and overwintering habitat that supports Largemouth bass, American shad, and Atlantic sturgeon I the Nanticoke River drainage is a priority for Delaware. Existing data could be used to identify these areas in general but additional research is needed to further refine specific habitat needs and determine where the most critical areas are located.	DE, Fish Habitat Action Team					
					Total		

Management Approach 3: Map and target high-value fish habitat for improved conservation and restoration. Partners will work with the science and management community to develop spatial tools for priority habitats and species to inform management decisions.							
Key Action**	**Performance Target(s)**	**Participating Entity**	**Geographic Location**	**Timeline**	**Estimated Project Cost**	**Available funding by**	**Factors Influencing and/or Gap** *Identify*
Overlay spatial data on fish species habitat dependence (by life stage) with high-value habitat.	Convene a workshop (STAC) to develop a strategy and prioritized recommendations for CBP to best utilize existing spatial habitat and fish data to support the fish habitat conservation and restoration.	Fish Habitat Action Team					
	Maryland has developed a mapping approach to identify high priority habitat for anadromous spawning areas in Maryland and will continue to develop similar maps for all life stages of our target species.	Fish Habitat Action Team					
	Complete development and testing of the Mid-Atlantic Telemetry Observing System (MATOS) Beta version and demonstrate successful operation.						
					Total		
Identify and where possible, fill spatial data gaps for specific species and/or tributary areas that lack sufficient data coverage.	Identify species and geographic areas (ex. Non-tidal areas) that need spatial data coverage and develop strategies to monitor.						
	Convert existing survey data to spatial datasets where needed.						

					Total		

Management Approach 4: Communicate importance of fish habitat to the general public and local community leaders by engaging in a conversation about the tradeoffs associated with competing uses of land and water.							
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Engage and communicate fish habitat needs with CBP partners and local communities.	Discuss species habitat requirements with Water Quality, Watersheds, Habitat, and Stewardship GITs.	Stewardship GIT, Partnering and Leadership GIT, Sustainable Fisheries GIT					
	Use species of local importance to tailor communications to specific areas.						
	Support Maryland's Fish Habitat Workgroup focused on sustaining and restoring viable fish habitats in Maryland in developing strategies to connect with rural communities to increase their commitment to maintain the rural character of their watersheds.						
	Delaware will collaborate with state planning staff and environmental review coordinators that already have a relationship with local jurisdictions and stakeholder groups (i.e. farmers, development consultants, the Department of Transportation). These staff can also aid with protection of habitat through the regulatory process - including use of the permitting process to protect habitat and by considering new ordinances and initiative that can be incorporated into local comprehensive land-use plans and master plans.						

Management Approach 5: Evaluate ways to enhance fish habitat protection by reviewing examples from other regions (e.g., the Puget Sound Partnership) and actively engaging with the Atlantic Coast Fish Habitat Partnership.							
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Engage local planners and restoration practitioners to understand what elements of habitat need to be conserved to provide for ecosystem services.	Initiate regular engagement with regional partnerships also working on habitat issues (i.e. NALCC).	Sustainable Fisheries GIT					
	Evaluate the effectiveness/success of other methods and efforts to achieve healthy and productive fish habitat.	STAR, Fish Habitat Action Team, organizations from other regions					

	Total						
Work with partners who are implementing fish habitat conservation projects.	Initiate regular engagement with regional partnerships also working on habitat issues (i.e. NALCC).	Sustainable Fisheries GIT					
	Work with ACFHP to ensure Chesapeake Bay habitats are included in their efforts.	STAR, Fish Habitat Action Team, organizations from other regions					
	Total						
Complete a review and analysis of fish habitat conservation efforts from other regions of the country.	Engage with TNC to understand their projects for anadromous fish on the East Coast and salmon efforts on the West Coast to identify potential application to the Chesapeake Bay.	TNC, Sustainable Fisheries GIT					
	Work with the National Fish Habitat Partnership Science and Data Committee to identify how the 2015 inland assessment may be used to characterize the primary stressors to freshwater habitats in the region.						
	Contact Midwest organizations to learn about tools developed for freshwater mussels in that region.						
Complete a review of policies and cultural views that may limit promotion of habitat conservation.							
	Total						